

REMARKS

Claims 1-3 and 6-10 are all the claims pending in the application.

I. Response to Claim Rejection Under 37 C.F.R. § 112

Claims 1, 3 and 6-10 are rejected under 37 C.F.R. § 112, 2nd paragraph, as failing to set forth the subject matter which applicants regard as their invention.

The Examiner asserts that the statement that “Comparative Example 3 in the specification (and in the Declaration) uses the same polymer as in Example 4 of Kojima et al and the Declaration shows significantly large differences in the rate of the change of the density . . .” indicates that the invention is different from what is defined in the claims. According to the Examiner, this is because comparison of Example 1 and Comparative Example 3 indicates that the I/O value relied upon in the specification examples and showings is based upon the entire copolymer rather than Q, whereas claim 1 recites that “Q is at least one unit provided from a monomer having an ethylenic double bond, and represents a unit having an inorganic/organic ratio (I/O value) of less than 1 in an organic conceptual chart.”

Applicants respectfully traverse the rejection. Applicants submit that the Examiner has misinterpreted the claim language. Claim 1 recites an I/O value for Q in formula (1), an I/O value for Z in formula (2) (which is optional) and an I/O value for the cationic resin represented by formula (1) or (2). Specifically regarding the I/O value for the cationic resin represented by formula (1) or (2), claim 1 recites:

wherein the monomer that provides the unit represented by Q or Z in the formula (1) or (2), respectively is styrene or vinyl toluene and the I/O value of the cationic

resin represented by formula (1) or (2) is not more than 2 with a cationic equivalent of at least 1.5 meq/g or more and no more than 4.

Thus, the data in the specification and the Declaration are commensurate in scope with the present claims in that “the I/O value of the cationic resin represented by formula (1) or (2) is not more than 2 with a cationic equivalent of at least 1.5 meq/g or more and no more than 4”, wherein polymer 1 having an I/O value of 1.89 is employed in Example 1 and polymer 8 having an I/O value of 2.48 is employed in Comparative Example 3 of the specification and the Declaration. This is also consistent with the description in the present specification on page 15, lines 11-22, which states:

The structure and contents of copolymerization components of the polymer represented by the formula (1) or (2) are preferably selected so that the inorganic/organic ratio (I/O value) in the organic conceptional chart is at least 2, and the cation equivalent is 1.5 to 4 meq/g. The effect for preventing time-dependent blurring may be insufficient due to too high solubility of the cationic resin in water, when the I/O value is larger than 2. The proportion of the dye mordant part becomes relatively small to insufficiently fix a dye, when the cation equivalent is less than 1.5 meq/g, while dispersability of the coating liquid is deteriorated when the cation equivalent is larger than 4 meq/g.

Accordingly, Example 1 is within the scope of the claims and Comparative Example 3, which employs the same polymer as in Example 4 of Kojima et al, is not within the scope of the present claims.

In view of the above, Applicants respectfully submit that the claim language is clear and withdrawal of the §112 rejection is requested.

II. Response to Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1, 3 and 6-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kojima et al (U.S. Patent No. 4,830,911) and further in view of Sugiyama et al (U.S. Patent No. 6,773,770).

The Examiner indicates that this rejection is essentially being maintained in view of, and for the reasons set forth above with respect to, the §112 rejection discussed above. The Examiner indicates that both rejections will be reconsidered once the issue raised in the §112 rejection is resolved.

Applicants respectfully submit that the §112 rejection should be withdrawn for the reasons set forth above.

Regarding the §103 rejection, taking the remarks above into consideration, as previously pointed out, Comparative Example 3 in the specification (and in the Declaration) uses the same polymer as in Example 4 of Kojima et al and the Declaration shows significantly large differences in the rate of change of the density. Thus, Applicants have provided a comparison to the closest prior art to show that the present invention provides unexpectedly superior results over the prior art.

Further, those ordinarily skilled in the art would not have expected the effect of suppression of time-dependent blurring of the present invention using a cationic resin having a cationic equivalent amount lower than that of the cationic resin taught by Kojima et al (U.S. Patent No. 4,830,911). Sugiyama et al does not cure the deficiencies of Kojima et al for the reasons of record. Thus, the presently claimed invention is not rendered obvious.

Accordingly, Applicants respectfully request withdrawal of the §103 rejection.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER


Jennifer M. Hayes
Registration No. 40,641

Date: January 5, 2007